with the medication has not been established, the number of cases continuing to be reported seems to support such a relationship. Other hepatic effects of these agents have been well documented. A registry of cases established by Kent and Nissen was announced in the August 1975 issue of this journal [West J Med 123:145, Aug 1975].

This entity should be considered in the differential diagnosis of any patient taking oral contraceptives in whom there are upper abdominal symptoms, or findings consistent with hemoperitoneum. Emergency operation to control bleeding may be mandatory.

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## **Evaluation of Thyroid Nodules**

THE MAIN REASON thyroid nodules are of concern to patients and clinicians is the possibility of thyroid malignancy. Certain conditions—such as a history of radiation exposure, especially in childhood, or the finding on physical examination of a hard discrete nodule or palpable cervical nodes suggest that a thyroid nodule is malignant. Radioiodine scanning is the most important laboratory procedure for evaluating thyroid lesions since the information obtained helps in differentiating between multinodular goiter and solitary thyroid nodules, and also distinguishes between active, "warm or hot" nodules or inactive "cool or cold" nodules. The reason this is important is that thyroid cancer is infrequent in multinodular goiters and rare in "active" thyroid nodules but occurs in about 25 percent of patients with solitary cold thyroid nodules. Numerous other isotopic studies (including those using technetium, cesium, gallium and selenomethionine) have been used to differentiate between benign and malignant thyroid tumors but the results of these studies are not reliable enough for selection of appropriate treatment.

The recent use of ultrasound in evaluating thyroid nodules, however, seems encouraging since cystic thyroid nodules are rarely malignant. Approximately 20 percent of cold solitary thyroid tumors are cystic and aspiration of these cysts usually results in cure. We would recommend that routine evaluation of patients with solitary thy-

roid nodules include both radioiodine scanning and ultrasound. When cysts are present they should be treated by aspiration and suppression of thyroid stimulating hormone with exogenous thyroid hormone. One might question carrying out needle biopsy in all thyroid nodules. The main problem with biopsy is that the specimen obtained is often unrepresentative of the most important histologic status of the gland.

Two new tests that are useful adjuncts in diagnosing thyroid cancer are serum calcitonin and thyroglobulin radioimmunoassays. Medullary carcinoma of the thyroid can now be diagnosed in family members of patients with Sipple's syndrome, by determining basal and calcium or pentagastrin stimulated levels of serum calcitonin, before this tumor is clinically apparent. Serum thyroglobulin levels, in contrast, are often elevated in patients with differentiated thyroid cancer but not in patients with medullary thyroid cancer. The latter test is especially useful in following patients in whom operations for differentiated thyroid cancer have been done.

A careful history, physical examination and intelligent use of laboratory tests will help in the selection of patients who require and who will benefit from thyroidectomy. Thyroidectomy carried out by surgeons experienced in endocrine surgical operations is associated with minimal morbidity and rare mortality.

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## Parietal Cell Vagotomy

In the Past five years a new operation, parietal cell vagotomy, has been given a rather extensive trial in several surgical units in the treatment of duodenal ulcer disease. Although conclusions as to its effectiveness must still be regarded as tentative, the continued success of this operation as reported by those with the greatest experience is increasingly significant.

Parietal cell vagotomy consists of vagally denervating the proximal two thirds of the stomach, the site of acid production. The vagal innervation to the antrum, which travels along the lesser curvature in the nerves of latarjet, is deliberately spared so as not to interfere with vagal control